3 entries found.

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deiw-
Important derivatives are: *Tuesday, deity, divine, jovial, July, Jupiter, Zeus, dial, diary, dismal, journey, psychedelic.*
To shine (and in many derivatives, "sky, heaven, god").

I. Noun **deiwos*, god.
   1.
      a. Tiu, (Tuesday), from Old English *Tīw* (genitive *Tīwes)*, god of war and sky;
      b. Tyr, from Old Norse *Týr*, sky god. Both **a** and **b** from Germanic **Tīwaz.*
   2. deism, deity, Deus, joss; adieu, deific, from Latin *deus*, god.
   3. diva, divine, from Latin *dīvus*, divine, god.
   4. Dives, from Latin *dīves*, rich (< "fortunate, blessed, divine").
   5. Suffixed zero-grade form **diw-yo-*, heavenly. Diana, from Latin *Diāna*, moon goddess.
   6. Devi; deodar, Devanagari, from Sanskrit *de- vaḥ*, god, and *deva-*, divine.

II. Variant **dyeu-*, Jove, the name of the god of the bright sky, head of the Indo-European pantheon.
   1. Jove, jovial, from Latin *Iovis*, Jupiter, or *Iov-*, stem of *Iuppiter*, Jupiter.
   2. July, from Latin *Iūlius*, "descended from Jupiter" (name of a Roman gens), from derivative **iou-il-*.
   3. Vocative compound **dyeu-pəter-*, "O father Jove" (**pəter-*, father; see **pəter-**). Jupiter, from Latin *Iuppiter*, *Iūpiter*, head of the Roman pantheon.

4. Dione, Zeus; Dioscuri, from Greek *Zeus* (genitive *Dios*), Zeus.

III. Variant **dyē-* (< **dyeə-*). dial, diary, diet[2], dismal, diurnal; adjourn, circadian, (journal), (journey), meridian, (postmeridian), quotidian, sojourn, from Latin *diēs*, day.

IV. Variant **deiə-*. psychedelic, from Greek *dēlos*, (< **deyalos*), clear.

[Pokorny 1. *dei-* 183.]

Pronunciation Key

cir·ca·di·an (sər-kā'dē-ən, -kăd'ē-, sûr'kə-dī'ən, -dē'-)
adj. Biology

Relating to or exhibiting approximately 24-hour periodicity.

[Latin circā, *around*; see circa + Latin diēs, *day*; see deiw- in Indo-European Roots.]

cir·ca'di·an·ly *adv.*

Pronunciation Key

circadian adj 1: of or relating to biological processes occurring at 24-hour intervals; "circadian rhythms" 2: (biology) exhibiting 24-hour periodicity

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PASSWORD:
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 NEWS 11  Jul  7  Patent Full-text Cluster, PNTTEXT, introduced
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 NEWS 14  Jul 27  Derwent Journal Of Synthetic Methods Reloaded
                  with New Data
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=> file medline cancerlit embase biosis

COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
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                                                          ENTRY     SESSION
FULL ESTIMATED COST                                        0.30        0.30

FILE 'MEDLINE' ENTERED AT 13:51:32 ON 23 AUG 2000

FILE 'CANCERLIT' ENTERED AT 13:51:32 ON 23 AUG 2000

FILE 'EMBASE' ENTERED AT 13:51:32 ON 23 AUG 2000
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FILE 'BIOSIS' ENTERED AT 13:51:32 ON 23 AUG 2000
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=> s tumor or carcinoma or cancer or neoplas?

   2 FILES SEARCHED...
L1     4193448 TUMOR OR CARCINOMA OR CANCER OR NEOPLAS?

=> s photodynamic therapy and l1

L2        9083 PHOTODYNAMIC THERAPY AND L1

=> s 5-ethylamino-9-diethylamino-benzo[a]phenothiazinium chloride

L3           0 5-ETHYLAMINO-9-DIETHYLAMINO-BENZO[A]PHENOTHIAZINIUM CHLORIDE

=> s benzophenoxa? analog

L4           0 BENZOPHENOXA? ANALOG

=> s benzophenoxazine

L5          26 BENZOPHENOXAZINE

=> s benzopheno? analog

L6           5 BENZOPHENO? ANALOG

=> s prolactin and l2

L7           2 PROLACTIN AND L2

=> dup rem l7

PROCESSING COMPLETED FOR L7
L8            2 DUP REM L7 (0 DUPLICATES REMOVED)

=> d ibib abs 1-2


L8   ANSWER 1 OF 2  EMBASE  COPYRIGHT 2000 ELSEVIER SCI. B.V.
ACCESSION NUMBER:   2000115150  EMBASE
TITLE:              Mice, mutations and mammary glands.
AUTHOR:             Tennent B.J.; Cardiff R.D.
CORPORATE SOURCE:   Dr. B.J. Tennent, Scientific Program Development, Jackson
                    Laboratory, 600 Main Street, Bar Harbor, ME 04609, United
                    States. rdcardiff@ucdavis.edu
SOURCE:             Molecular Medicine Today, (2000) 6/4 (143-144).
                    ISSN: 1357-4310  CODEN: MMTOFK
```

PUBLISHER IDENT.: S 1357-4310(00)01680-4
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Conference Article
FILE SEGMENT: 016 Cancer
037 Drug Literature Index
LANGUAGE: English

L8 ANSWER 2 OF 2 BIOSIS COPYRIGHT 2000 BIOSIS
ACCESSION NUMBER: 1998:461003 BIOSIS
DOCUMENT NUMBER: PREV199800461003
TITLE: Resetting the neuroendocrine-immune axis leads to enhanced PDT effects.
AUTHOR(S): Cincotta, A.; Henion, J.; Cincotta, E.
CORPORATE SOURCE: Ergo Science Corp., Charlestown, MA 02129 USA
SOURCE: Photochemistry and Photobiology, (June, 1998) Vol. 67, No. SPEC. ISSUE, pp. 92S.
Meeting Info.: 26th Annual Meeting of the American Society for Photobiology Snowbird, Utah, USA July 11-15, 1998
American Society for Photobiology
. ISSN: 0031-8655.
DOCUMENT TYPE: Conference
LANGUAGE: English

=> d hsi

'HSI' IS NOT A VALID FORMAT
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REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):his

'HIS' IS NOT A VALID FORMAT
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REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):d his

'D' IS NOT A VALID FORMAT
'HIS' IS NOT A VALID FORMAT
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REENTER DISPLAY FORMAT FOR ALL FILES (FILEDEFAULT):abs

L8 ANSWER 1 OF 2 EMBASE COPYRIGHT 2000 ELSEVIER SCI. B.V.

=> d his

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```
     FILE 'MEDLINE, CANCERLIT, EMBASE, BIOSIS' ENTERED AT 13:51:32 ON 23 AUG
     2000
L1      4193448 S TUMOR OR CARCINOMA OR CANCER OR NEOPLAS?
L2         9083 S PHOTODYNAMIC THERAPY AND L1
L3            0 S 5-ETHYLAMINO-9-DIETHYLAMINO-BENZO[A]PHENOTHIAZINIUM CHLORIDE
L4            0 S BENZOPHENOXA? ANALOG
L5           26 S BENZOPHENOXAZINE
L6            5 S BENZOPHENO? ANALOG
L7            2 S PROLACTIN AND L2
L8            2 DUP REM L7 (0 DUPLICATES REMOVED)

=> s photobiolog?

L9         2615 PHOTOBIOLOG?

=> s l9 and l1

L10         569 L9 AND L1

=> s l10 and prolactin

L11           0 L10 AND PROLACTIN

=> s prolactin

L12      120349 PROLACTIN

=> s l12 and l1

L13       24801 L12 AND L1

=> l5 and l13

L5 IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

=> s l5 and l13

L14           0 L5 AND L13

=> d his


     (FILE 'HOME' ENTERED AT 13:50:10 ON 23 AUG 2000)

     FILE 'MEDLINE, CANCERLIT, EMBASE, BIOSIS' ENTERED AT 13:51:32 ON 23 AUG
     2000
L1      4193448 S TUMOR OR CARCINOMA OR CANCER OR NEOPLAS?
L2         9083 S PHOTODYNAMIC THERAPY AND L1
L3            0 S 5-ETHYLAMINO-9-DIETHYLAMINO-BENZO[A]PHENOTHIAZINIUM CHLORIDE
L4            0 S BENZOPHENOXA? ANALOG
L5           26 S BENZOPHENOXAZINE
L6            5 S BENZOPHENO? ANALOG
L7            2 S PROLACTIN AND L2
L8            2 DUP REM L7 (0 DUPLICATES REMOVED)
L9         2615 S PHOTOBIOLOG?
L10         569 S L9 AND L1
```

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L11           0 S L10 AND PROLACTIN
L12      120349 S PROLACTIN
L13       24801 S L12 AND L1
L14           0 S L5 AND L13

=> s l13 and photo?

L15         116 L13 AND PHOTO?

=> s l15 and py<1997

   2 FILES SEARCHED...
L16          96 L15 AND PY<1997

=> dup rem l16

PROCESSING COMPLETED FOR L16
L17          43 DUP REM L16 (53 DUPLICATES REMOVED)

=> d ibib abs 1-43


L17  ANSWER 1 OF 43  MEDLINE                                  DUPLICATE 1
ACCESSION NUMBER:    97207766     MEDLINE
DOCUMENT NUMBER:     97207766
TITLE:               Large macroprolactinoma treated with bromocriptine alone.
AUTHOR:              Loh K C; Shlossberg A H
CORPORATE SOURCE:    Department of Medicine, Dalhousie University, Halifax,
                     Canada.
SOURCE:              ANNALS OF THE ACADEMY OF MEDICINE, SINGAPORE, (1996
                     Nov) 25 (6) 886-9.
                     Journal code: 53F. ISSN: 0304-4602.
PUB. COUNTRY:        Singapore
                     Journal; Article; (JOURNAL ARTICLE)
LANGUAGE:            English
FILE SEGMENT:        Priority Journals
ENTRY MONTH:         199707
ENTRY WEEK:          19970705
AB   We report a case of a large macroprolactinoma in a 44-year-old male
     photographer who presented with affected colour perception and a
     central scotoma of the right eye. An initial computerised tomographic
(CT)
     scan showed an enormous mass lesion extending from the nasopharyngeal
area
     to the third ventricle, with destruction of the skull base. The initial
     serum prolactin level was 29 180 micrograms/L (normal < 15.8
     micrograms/L) while other pituitary hormones were within normal ranges.
     The patient was treated with oral bromocriptine with prompt resolution of
     visual defects while significant reductions in tumour size (> 50%) and
     prolactin level (> 99%) were achieved over a one-year period. This
     represents one of the highest serum prolactin levels reported in
     the literature in a patient with a prolactin-secreting pituitary
     tumour and illustrates the remarkable efficacy of dopamine agonist
therapy
     in patients with large macroprolactinomas.

L17  ANSWER 2 OF 43  MEDLINE                                  DUPLICATE 2
ACCESSION NUMBER:    97191385     MEDLINE
DOCUMENT NUMBER:     97191385
```

TITLE: In vivo imaging of pituitary tumours using a radiolabelled dopamine D2 receptor radioligand.
AUTHOR: de Herder W W; Reijs A E; Kwekkeboom D J; Hofland L J; Nobels F R; Oei H Y; Krenning E P; Lamberts S W
CORPORATE SOURCE: Department of Internal Medicine III, University Hospital Rotterdam, The Netherlands.
SOURCE: CLINICAL ENDOCRINOLOGY, **(1996 Dec)** 45 (6) 755-67.
Journal code: DCI. ISSN: 0300-0664.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199705
ENTRY WEEK: 19970503

AB OBJECTIVE: Knowledge of the dopamine D2 receptor status of pituitary tumours may play a predictive role in differential diagnosis and therapeutic decisions. This study was performed to evaluate the value of pituitary dopamine D2 receptor scintigraphy with (S)-2-hydroxy-3-123I-iodo-6-methoxy-N-[(1-ethyl-2-pyrrolidinyl) methyl]benzamide (123I-IBZM) in the diagnostic evaluation of patients with pituitary tumours. DESIGN AND PATIENTS: Scintigraphy using 123I-IBZM was performed in 5 patients with PRL-secreting macroadenomas, 2 patients with PRL-secreting microadenomas, 17 patients with clinically non-functioning pituitary adenomas (NFPAs), 12 patients with GH-secreting adenomas and 1 patient with a TSH-secreting macroadenoma. RESULTS: Single-**photon** emission tomography (SPECT) showed significant uptake of 123I-IBZM in the pituitary region in 3/5 macroprolactinoma patients. These results closely correlated with the response of plasma PRL levels to the dopamine D2 receptor agonist quinagolide. In two scan-positive prolactinoma patients, repeated SPECTs during therapy with quinagolide showed a reduction in the pituitary uptake of 123I-IBZM. Pituitary SPECT was negative in the 2 microprolactinoma patients, who responded to quinagolide administration. In 4/17 patients with NFPA, significant uptake of the radioligand in the pituitary region was observed. In 2/3 scan-positive NFPA patients, who were treated with quinagolide, shrinkage of the pituitary tumours was observed. Treatment with quinagolide resulted in stabilization of tumour growth in the other scan-positive patients. Four out of 17 patients with NFPA and a negative SPECT were treated with quinagolide. Tumour growth was observed in 1 patient, and tumour size did not change in the other 3 patients. The pituitary region of none of the 12 acromegaly patients showed significant uptake of 123I-IBZM. Sensitivity of the GH-secreting adenomas to quinagolide was demonstrated in 8/12 patients in vivo by an acute test, and in 6/9 of the tumours in vitro. Pituitary SPECT was negative in the patient with the TSH-secreting macroadenoma and this tumour also showed no sensitivity to quinagolide in vivo or in vitro. CONCLUSIONS: We conclude that 123I-IBZM is a ligand for in vivo imaging of dopamine agonist-sensitive macroprolactinomas, but not for microprolactinomas or GH-secreting adenomas. The technique potentially provides a means of predicting the dopamine agonist-responses of non-functioning pituitary adenomas in vivo.

L17 ANSWER 3 OF 43 MEDLINE DUPLICATE 3
ACCESSION NUMBER: 97140725 MEDLINE
DOCUMENT NUMBER: 97140725
TITLE: Seasonal changes in immune function.

AUTHOR: Nelson R J; Demas G E
CORPORATE SOURCE: Department of Psychology, Johns Hopkins University, Baltimore, Maryland 21218, USA.
SOURCE: QUARTERLY REVIEW OF BIOLOGY, **(1996 Dec)** 71 (4) 511-48. Ref: 270
Journal code: QLJ. ISSN: 0033-5770.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, ACADEMIC)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199704
ENTRY WEEK: 19970403
AB Winter is energetically demanding. Physiological and behavioral adaptations have evolved among nontropical animals to cope with winter because thermoregulatory demands increase when food availability decreases. Seasonal breeding is central within the suite of winter adaptations among small animals. Presumably, reproductive inhibition during winter conserves energy at a time when the adds of producing viable young are low. In addition to the well-studied seasonal cycles of mating and birth, there are also significant seasonal cycles of illness and death among many populations of mammals and birds in the field. Challenging winter conditions. such as low ambient temperatures and decreased food availability, can directly induce death via hypothermia, starvation or shock. In some cases, survival in demanding winter conditions puts individuals under great physiological stress, defined here as an adaptive process that results in elevated blood levels of glucocorticoids. The stress of coping with energetically demanding conditions can also indirectly cause illness and death by compromising immune function. Presumably, the increased blood concentrations of adrenocortical steroids in response to winter stressors compromise immune function and accelerate catabolic mechanisms in the field, although the physiological effects of elevated glucocorticoids induced by artificial stressors have been investigated primarily in the laboratory. However, recurrent environmental stressors could reduce survival if they evoke persistent glucocorticoid secretion. The working hypothesis of this article is that mechanisms have evolved in some animals to combat seasonal stress-induced immunocompromise as a temporal adaptation to promote survival. Furthermore, we hypothesize that mechanisms have evolved that allow individuals to anticipate periods of immunologically challenging conditions, and to cope with these seasonal health-threatening conditions. The primary environmental cue that permits physiological anticipation of season is the daily **photoperiod;** however, other environmental factors may interact with **photoperiod** to affect immune function and disease processes. The evidence for seasonal fluctuations in lymphatic organ size, structure, immune function, and disease processes, and their possible interactions with recurrent environmental stressors, is reviewed. Seasonal peaks of lymphatic organ size and structure generally occur in late autumn or early winter and seasonal minima are observed prior to the onset of breeding. Although many of the field data suggest that immune function and disease processes are also enhanced during the winter, the opposite seasonal pattern is also

observed in some studies. We propose that compromised immune function may be observed in some populations during particularly harsh winters when stressors override the enhancement of immune function evoked by short day lengths. Because so many factors covary in field studies, assessment of our proposal that **photoperiod** mediates seasonal changes in immune function requires laboratory studies in which only **photoperiod** is varied. A review of the effects of **photoperiod** on immune function in laboratory studies reveals that exposure to short day lengths enhances immune function in every species examined. Short day exposure in small mammals causes reproductive inhibition and concomitant reduction in plasma levels of **prolactin** and steroid hormones, as well as alterations in the temporal pattern of pineal melatonin secretion. These hormones affect immune function, and influence the development of opportunistic diseases, including **cancer**: however, it appears that either **prolactin** or melatonin secretion is responsible for mediating the effects of **photoperiod** on immune function. Taken together, day length appears to affect immune function in many species, including animals that typically do not exhibit reproductive responsiveness to day length.

L17 ANSWER 4 OF 43 BIOSIS COPYRIGHT 2000 BIOSIS
ACCESSION NUMBER: 1996:61270 BIOSIS
DOCUMENT NUMBER: PREV199698633405
TITLE: Expression and localization of **prolactin** messenger ribonucleic acid in the human immune system.
AUTHOR(S): Wu, Hong; Devi, Rama; Malarkey, William B. (1)
CORPORATE SOURCE: (1) N-1105 Doan Hall, 410 W. Tenth Ave., Columbus, OH 43210
USA
SOURCE: Endocrinology, (1996) Vol. 137, No. 1, pp. 349-353.
ISSN: 0013-7227.
DOCUMENT TYPE: Article
LANGUAGE: English
AB Pituitary PRL is involved in immunoregulation. Also, a PRL-like molecule is secreted by peripheral blood mononuclear cells. In this study, we examined tissues of the human immune system to evaluate if the PRL gene is expressed and to determine the location and type of cells involved in its synthesis. To evaluate the expression of PRL messenger RNA (mRNA) in normal and abnormal human lymphoid tissues, we used RT-PCR to generate a specific 276-bp product from normal human thymus, spleen, tonsil, lymph node, and lymphoid **tumors**. Restriction enzyme digestion confirmed that this PCR product was expressed PRL. Furthermore, we developed a specific and sensitive nonisotopic in situ hybridization technique for PRL mRNA, and cells containing PRL mRNA were found in each tissue of the human immune system. Also, PRL mRNA was widely distributed throughout **neoplastic** tissue from a thymoma and lymphomas where mitogenic and anti-apoptotic properties of PRL could be involved in **tumor** progression. PRL mRNA was localized in lymphocytes, epithelial cells, and vascular endothelial cells. The presence of PRL mRNA in vascular endothelium cells suggests other roles for PRL in these tissues in addition to immunomodulation. In conclusion, the presence of PRL mRNA in human lymphoid tissue implies that locally synthesized PRL may play a critical role in immunocompetence by providing an important regulatory signal to the microenvironment of human lymphoid organs.

L17 ANSWER 5 OF 43 BIOSIS COPYRIGHT 2000 BIOSIS

ACCESSION NUMBER: 1996:63536 BIOSIS
DOCUMENT NUMBER: PREV199698635671
TITLE: A paradoxical inhibition of androgenic hyperproduction by a
Sertoli-Leydig cell tumour ovary.
AUTHOR(S): Amato, Giovanni (1); Izzo, Giovanni; Izzo, Alfredo
CORPORATE SOURCE: (1) Dep. Endocrinol., Fac. Med. Surg., Second Univ. of Naples, Naples Italy
SOURCE: Human Reproduction (Oxford), (1995) Vol. 10, No. 11, pp. 2967-2968.
ISSN: 0268-1161.
DOCUMENT TYPE: Article
LANGUAGE: English
AB A 17 year old woman was evaluated for amenorrhoea and severe hirsutism (Ferriman-Gallway index = 31). Pelvic ultrasound demonstrated a right unilateral ovarian mass (6x5 cm), whereas the computed tomography for the adrenal gland was normal. Endocrinological findings revealed normal concentrations of oestradiol, progesterone, dihydroepiandrosterone sulphate, cortisol, **prolactin**, follicle-stimulating hormone, luteinizing hormone and adrenocorticotrophic hormone (ACTH). Total testosterone, free testosterone, androstenedione and 17-hydroxy-progesterone concentrations, already elevated at basal conditions, did not increase after an ACTH test, whereas they decreased significantly after dexamethasone administration and increased after a human chorionic gonadotrophin test. Of all the tumour markers investigated, tissue polypeptide antigen and alpha-1-fetoprotein showed an increase in concentration. Selective venous ovarian catheterization indicated the presence of an androgen-producing tumour in the right ovary. The histopathological diagnosis was consistent with a Sertoli-Leydig cell tumour ranking between an intermediate and a poor grade of differentiation, with heterologous elements characterized by mucinous epithelium of the gastrointestinal type. An endocrine evaluation performed postoperatively showed a normalization of all serum pathological hormones and tumour markers studied. Some particular aspects were focused on and discussed.

L17 ANSWER 6 OF 43 MEDLINE DUPLICATE 4
ACCESSION NUMBER: 95355566 MEDLINE
DOCUMENT NUMBER: 95355566
TITLE: In vivo visualization of pituitary dopaminergic receptors by iodine-123 methoxybenzamide (IBZM) correlates with sensitivity to dopamine agonists in two patients with macroprolactinomas.
AUTHOR: Scillitani A; Dicembrino F; Di Fazio P; Vettori P P; D'Angelo V; Scarabino T; Liuzzi A
CORPORATE SOURCE: Division of Endocrinology, Ospedale Casa Sollievo Della Sofferenza, Istituto Di Ricovero e Cura A Carattere Scientific Co, S. Giovanni Rotondo, Italy..
SOURCE: JOURNAL OF CLINICAL ENDOCRINOLOGY AND METABOLISM, **(1995 Aug)** 80 (8) 2523-5.
Journal code: HRB. ISSN: 0021-972X.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals; Cancer Journals
ENTRY MONTH: 199511

AB We performed in two patients with macroprolactinoma, pituitary scintigraphy with 123 iodine-methoxybenzamide (IBZM), a dopaminergic antagonist that specifically binds to the D2 dopaminergic receptors. In a 34-yr-old woman with basal PRL levels of about 2000 ng/mL, 7.5 mg/day of Bromocriptine (Br) for a month neither reduced PRL levels nor affected **tumor** size; in this patient single **photon** emission tomography SPECT failed to show any pituitary accumulation of the tracer. In the other patient, a 27-yr-old man presenting with cerebrospinal fluid rhinorrhea, basal PRL levels were at 5000 ng/mL; magnetic resonance imaging (MRI) demonstrated a huge pituitary **tumor**, and SPECT showed a very intense concentration of IBZM at the level of the adenoma. PRL levels fell dramatically to 530 ng/mL with only 2.5 mg/day of Br after 4 days; after 6 days with 7.5 mg/day Br, PRL levels were 63 ng/mL, and the patient underwent surgery to correct cerebrospinal fluid leakage. We conclude that, in these two patients, the pituitary scintigraphy with IBZM has given information on the density of dopamine receptors on the adenoma and has correlated with the inhibitory effect of Br on PRL secretion. Whether this tool might be of value in identifying patients with pituitary **tumors** potentially responsive to Br treatment is still to be investigated.

L17 ANSWER 7 OF 43 EMBASE COPYRIGHT 2000 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 96219353 EMBASE
DOCUMENT NUMBER: 1996219353
TITLE: [111In-DTPA-octreotide scintigraphy in the diagnosis and follow-up of hypophyseal adenoma].
LA SCINTIGRAFIA CON 111IN-DTPA-OCTREOTIDE NELLA DIAGNOSI E NEL FOLLOW-UP DEGLI ADENOMI IPOFISARI.
AUTHOR: Lauriero F.; Pierangeli E.; Rubini G.; D'Addabbo A.
CORPORATE SOURCE: Centro Interdipart. di Biocibernet., Cattedra di Medicina Nucleare, Universita di Bari,Bari, Italy
SOURCE: Rivista di Neurobiologia, (1995) 41/6 (1013-1018).
ISSN: 0035-6336 CODEN: RNBLAC
COUNTRY: Italy
DOCUMENT TYPE: Journal; Conference Article
FILE SEGMENT: 003 Endocrinology
008 Neurology and Neurosurgery
014 Radiology
LANGUAGE: Italian
SUMMARY LANGUAGE: Italian; English
AB 111In-DTPA-Octreotide (OCT) scintigraphy permits the visualization of **neoplasms** with receptors of somatostatin (RS) on the cellular membrane and their eventual metastases. RS were identified in the GH and PRL-secreting hypophysial adenoma. This study evaluated the usefulness of 111In-OCT scintigraphy by Single **Photon** Emission Tomography (SPET) in the diagnosis of hypophysial adenoma, the identification of postsurgical minimum residue and the consequences of the therapeutic strategy adopted. 111In-OCT scintigraphy identified hypophysial adenoma in 13 out of 17 patients (76,5%); 6 GH-secreting, 6 PRL-secreting and 1 non-secreting. In 8 pts (4 GH-secreting and 4 PRL-secreting) clinical symptoms and hormonal hypersecretion returned after transnasal-sphenoidal adenectomy. A second 111In-OCT SPET was performed revealing the presence, in 6 pts, of residual adenomatous tissue with radiopharmaceutical uptake (4 GH-secreting adenoma and 2 PRL secreting). RM had revealed the residue

in only 3 of these. 111In-OCT SPET should be considered a useful tool, together with other diagnostic imaging techniques, in the follow-up of hypophysial adenoma, especially in negative results. It provides a better selection of patients for analogous somatostatin drug therapy and further treatment with radiation therapy and/or surgery, thus contributing to the definition of a personalized treatment plan.

L17 ANSWER 8 OF 43 EMBASE COPYRIGHT 2000 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 95237785 EMBASE
DOCUMENT NUMBER: 1995237785
TITLE: Resolution of migraine following bromocriptine treatment of
a prolactinoma (pituitary microadenoma).
AUTHOR: Hartman N.; Voron S.C.; Hershman J.M.
CORPORATE SOURCE: West Los Angeles VAMC, 11301 Wilshire Boulevard,Los Angeles, CA 90073, United States
SOURCE: Headache, (1995) 35/7 (430-431).
ISSN: 0017-8748 CODEN: HEADAE
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 003 Endocrinology
008 Neurology and Neurosurgery
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English
AB A 39-year-old male physician with a 27-year history of chronic severe migraine had a **prolactin**-secreting pituitary microadenoma diagnosed as an incidental finding following an automobile accident. Treatment of the prolactinoma with bromocriptine provided complete and lasting resolution of the migraine as well, suggesting a possible etiologic relationship between these two prevalent conditions, and the possibility of treating at least some cases of migraine with bromocriptine.

L17 ANSWER 9 OF 43 MEDLINE DUPLICATE 5
ACCESSION NUMBER: 95382272 MEDLINE
DOCUMENT NUMBER: 95382272
TITLE: [Role of absorptiometry in the evaluation of bone tissue status in women with primary hyperprolactinemia].
Rol' absorbtsiometricheskikh issledovanii v otsenke sostoianiia kostnoi tkani u zhenshchin s pervichnoi giperprolaktinemiei.
AUTHOR: Baidak M M
SOURCE: AKUSHERSTVO I GINEKOLOGIIA, **(1995)** (3) 35-7.
Journal code: 33Y. ISSN: 0300-9092.
PUB. COUNTRY: RUSSIA: Russian Federation
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: Russian
ENTRY MONTH: 199512
AB Mineral density of bone tissue was assessed in 22 patients with oligoamenorrhea caused by primary hyperprolactinemia. Primary hyperprolactinemia in the presence of pituitary adenoma was diagnosed in 8
patients, primary functional form of the disease in 14. Fifteen healthy women were controls. Blood serum concentrations of **prolactin**, estradiol, progesterone, testosterone, hydrocortisone, LH, and FSH were measured. Bone tissue mineral density was assessed by monophoton absorptiometry in the distal portion of the radial bone at sites 1/3 and 1/20 of its length two times with one-year interval. Abnormal loss of

mineral density of bone tissue in 1/3 site was detected in 4 out of 14 patients with functional and in 3 out of 8 patients with tumorous hyperprolactinemia, in site 1/20 in 9 out of 14 and in 8, respectively. Reduction of mineral density of bone tissue was associated with pronounced hormonal imbalance in all the patients with accelerated loss of bone tissue, no matter what form of primary hyperprolactinemia they developed.

L17 ANSWER 10 OF 43 BIOSIS COPYRIGHT 2000 BIOSIS
ACCESSION NUMBER: 1994:548607 BIOSIS
DOCUMENT NUMBER: PREV199598008155
TITLE: Iodine-123-IBZM-SPECT: Studies in 15 patients with pituitary **tumors**.
AUTHOR(S): Pirker, W. (1); Brucke, T.; Riedl, M.; Clodi, M.; Luger, A.; Asenbaum, S.; Podreka, I.; Deecke, L.
CORPORATE SOURCE: (1) Neurol. Univ. Clin., Wahringer Gurtel 18-20, A-1090 Vienna Austria
SOURCE: Journal of Neural Transmission General Section, (1994) Vol. 97, No. 3, pp. 235-244.
DOCUMENT TYPE: Article
LANGUAGE: English
AB Single **photon** emission computerized tomography (SPECT) using the Iodine 123 labeled dopamine D-2 receptor antagonist S (-)Iodobenzamide (S (-)IBZM) was performed in 15 patients with pituitary **tumors**. Among them there were five prolactinoma patients with macroadenoma and two acromegalic patients with macroadenoma. Specific binding in the area of the adenoma was only observed in one subject, a macroprolactinoma patient, who was responsive to dopaminergic treatment. None of the other patients, among them one macroprolactinoma patient responsive to dopaminergic treatment showed specific binding in the area of the **tumor**. IBZM-binding in the striatum was found to be significantly lower in the group of pituitary **tumor** patients as compared to controls. The results show that D2 receptors in pituitary adenomas can be visualized using SPECT. However, the sensitivity of IBZM-SPECT appears to be too poor to visualize PRL- and GH- secreting macroadenomas in general.

L17 ANSWER 11 OF 43 MEDLINE DUPLICATE 6
ACCESSION NUMBER: 95290703 MEDLINE
DOCUMENT NUMBER: 95290703
TITLE: **Photoperiodic** effects on **tumor** development and immune function.
AUTHOR: Nelson R J; Blom J M
CORPORATE SOURCE: Department of Psychology, Johns Hopkins University, Baltimore, Maryland 21218, USA..
CONTRACT NUMBER: HD 22201 (NICHD)
CA 58168 (NCI)
P30 HD 06268 (NICHD)
SOURCE: JOURNAL OF BIOLOGICAL RHYTHMS, **(1994 Winter)** 9 (3-4) 233-49.
Journal code: A9L. ISSN: 0748-7304.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199509

AB Seasonal changes in adaptations associated with winter coping strategies have been frequently studied. Central among the suite of energy-saving, winter-coping strategies is the suspension of reproductive activities. The inhibition of reproduction by nontropical rodents is mediated by daylength changes. Although balanced annual energy budgets are critical, survival and subsequent reproductive success also require avoiding predators, illness, and early death. Because the stressors of winter could lead to suppressed immune function, we hypothesized that animals should have evolved survival strategies involving immunoenhancement. Short daylengths provide a predictive cue to individuals that could be used to enhance immune function in advance of stress-induced immunosuppression. In Experiment 1, adult female deer mice (Peromyscus maniculatus) were housed in either long (LD 16:8) or short (LD 8:16) days for 8 weeks, then injected with the chemical carcinogen 9,10-dimethyl-1,2-benzanthracene (DMBA) dissolved in dimethyl sulfoxide (DMSO) or with the DMSO vehicle alone. Animals were evaluated weekly for 8 weeks after injection. None of the animals treated with DMSO developed **tumors** in any of the experiments. Nearly 90% of the long-day deer mice injected with DMBA developed squamous cell **carcinoma**. None of the short-day deer mice injected with DMBA developed **tumors**. Small lesions developed at the site of injection; short-day females had less severe lesions and healed faster than long-day females. Immunoglobulin G (IgG) response to i.p. injection of sheep red blood cells (SRBC) did not differ **photoperiodic** conditions. The role of estrogens in the **photoperiodic** responses was evaluated in Experiment 2: Ovariectomized or sham-ovariectomized deer mice received estradiol benzoate replacement therapy or a control procedure in long daylengths for 8 weeks prior to injection of DMBA or DMSO, then were monitored for 8 additional weeks. Females treated with DMBA developed **tumors** at the same rate, regardless of estrogen manipulation. Estrogen did not affect healing rates. In Experiment 3, female deer mice were injected with a slurry of microspheres that either contained bromocriptine or were empty. Suppression of **prolactin** with bromocriptine resulted in a decrease of **tumor** incidence from 55.6% to 24% in long-day females 8 weeks after injection with DMBA. Healing rates were not affected by **prolactin** manipulations. Silastic capsules that were filled with either melatonin or cholesterol were implanted into long-day female deer mice in Experiment 4; 8 weeks later, females received an injection of either DMBA or DMSO, then were monitored for 8 weeks.(ABSTRACT TRUNCATED AT 400 WORDS)

L17 ANSWER 12 OF 43 EMBASE COPYRIGHT 2000 ELSEVIER SCI. B.V.

ACCESSION NUMBER: 94282889 EMBASE
DOCUMENT NUMBER: 1994282889
TITLE: Hormonal characterization and classification of breast cyst fluid in gross cystic mastopathy.
AUTHOR: Szamel I.; Budai B.; Daubner K.; Kralovanszky J.; Otto S.; Toth J.; Besznyak I.
CORPORATE SOURCE: Laboratory for Radiochemistry, National Institute of Oncology, Rath Gyorgy u 7-9,1122 Budapest, Hungary
SOURCE: Endocrine-Related Cancer, (1994) 1/2 (49-55).
ISSN: 1351-0088 CODEN: ERCAE

COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 003 Endocrinology
016 Cancer
029 Clinical Biochemistry
LANGUAGE: English
SUMMARY LANGUAGE: English
AB Gross cystic disease (GCD) of the breast may be associated with a higher risk for the development of breast **cancer**. High levels of sex steroids, steroid hormone precursors, **prolactin** and cations have been found in breast cyst fluid (BCF) by several investigators. Accordingly, endocrine parameters and the cationic composition of BCF may be considered as useful characteristics to follow patients bearing macrocysts. In this study we have investigated the concentrations of estradiol (E2), progesterone, testosterone, dehydroepiandrosterone (DHA) and DHA-3-sulfate (DHA-S), **prolactin**, potassium (K+) and sodium (Na+) in BCF aspirated from 99 women. The mean age of the patients was 49.8 years (range 32-58). The hormone levels were measured by RIA methods;
K+ and Na+ were determined by flame **photometry**. Estradiol, progesterone, testosterone, DHA, DHA-S, **prolactin** and K+ showed significant accumulation in the BCF compared with their respective serum values. The K+/Na+ ratio proved to be useful in dividing cysts into type I
(.gtoreq.1), type II (<1 but .gtoreq.0.1) and type III (<0.1) subgroups. For type I BCF, higher DHA, DHA-S and **prolactin** concentrations were detected. Linear regression analysis established a highly significant
(P<0.001) correlation between the concentrations of E2 and DHA-S (r = 0.686), and also between testosterone and DHA-S (r = 0.711). These findings indicate that type I BCF might be a marker for 'active' GCD of the breast, and suggest that it may be associated with an increased breast
cancer risk, since this group of patients is supposed to have cysts with apocrine metaplasia. It is suggested therefore that when BCF is
aspirated, sex steroids, steroid precursors and cations should be routinely measured, and women with type I cysts should be regularly examined.

L17 ANSWER 13 OF 43 MEDLINE DUPLICATE 7
ACCESSION NUMBER: 93339336 MEDLINE
DOCUMENT NUMBER: 93339336
TITLE: Imaging of dopamine D2 and somatostatin receptors in vivo using single-**photon** emission tomography in a patient with a TSH/PRL-producing pituitary macroadenoma.
AUTHOR: Verhoeff N P; Bemelman F J; Wiersinga W M; van Royen E A
CORPORATE SOURCE: Department of Nuclear Medicine, Academic Medical Centre, Amsterdam Zuidoost, The Netherlands..
SOURCE: EUROPEAN JOURNAL OF NUCLEAR MEDICINE, **(1993 Jun)** 20 (6) 555-61.
Journal code: ENC. ISSN: 0340-6997.
PUB. COUNTRY: GERMANY: Germany, Federal Republic of
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199311
AB A 28-year-old man with a thyroid stimulating hormone/**prolactin** (TSH/PRL)-secreting pituitary macroadenoma is discussed in relation to

dopamine D2 and somatostatin receptor single-**photon** emission tomography (SPET). The patient presented with decreased vision in the left eye as a result of a temporal visual field defect and with mild hyperthyroidism. Medical therapy was tried. A test dose of both octreotide and bromocriptine resulted in an acute reduction in serum levels of TSH, alpha-subunits and PRL, whereas there was no response to TRIAC. Somatostatin and dopamine D2 receptors were present on the tumour as visualised by SPET with the ligands indium-111 diethylene triamine penta-acetic acid (DTPA)-octreotide (111In-SMS) and iodine-123 iodobenzamide (123I-IBZM), respectively. Therefore, treatment with octreotide 150 micrograms t.i.d. subcutaneously and bromocriptine 10 mg b.i.d. orally was given for > 12 and > 6 weeks, respectively. Following this treatment the visual defects disappeared, although tumour size, as measured by CT scanning, and serum TSH levels did not decrease. SPET with 111In-SMS and 123I-IBZM after therapy revealed no change or a possible increase in somatostatin receptor binding potential and a possible decrease in dopamine D2 receptor binding potential. The lack of long-term effects of the medical treatment is discussed. It is concluded that a high somatostatin and dopamine D2 receptor binding potential in vivo in a TSH/PRL-producing adenoma does not necessarily predict a successful outcome of medical treatment.

L17 ANSWER 14 OF 43 MEDLINE DUPLICATE 8
ACCESSION NUMBER: 93321413 MEDLINE
DOCUMENT NUMBER: 93321413
TITLE: Intracranial dissemination of a macroprolactinoma.
AUTHOR: Assies J; Verhoeff N P; Bosch D A; Hofland L J
CORPORATE SOURCE: Department of Psychiatry, Academic Medical Centre, Amsterdam, The Netherlands..
SOURCE: CLINICAL ENDOCRINOLOGY, **(1993 May)** 38 (5) 539-46. Journal code: DCI. ISSN: 0300-0664.
PUB. COUNTRY: ENGLAND: United Kingdom Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199310
AB A patient with a macroprolactinoma and extrasellar extension was treated by incomplete transfrontal surgery, external irradiation and additional bromocriptine (Br) treatment. After 4 years, partial bromocriptine resistance developed (a rare occurrence) together with the appearance of intracranial metastases. 123I-Iodobenzamide was helpful in evaluating the dopamine D2 receptor status of the metastatic tumour both in vivo using single-**photon** emission computed tomography (SPECT) and in vitro. **Prolactin** release by the cultured metastatic tumour cells was more potently inhibited by CV 205-502 than by bromocriptine. The patient, treated by surgery, irradiation and CV 205-502, developed a ptosis of the left eye and a transient psychiatric delusional state, the latter probably an effect of the dopamine agonist. As the right frontal metastasis was markedly positive on SPECT with 111In-SMS, somatostatin treatment was added to the CV 205-502.

L17 ANSWER 15 OF 43 MEDLINE DUPLICATE 9
ACCESSION NUMBER: 91296077 MEDLINE
DOCUMENT NUMBER: 91296077
TITLE: Positron emission tomography of pituitary macroadenomas:

hormone production and effects of therapies.
AUTHOR: Francavilla T L; Miletich R S; DeMichele D; Patronas N J; Oldfield E H; Weintraub B D; Di Chiro G
CORPORATE SOURCE: Neuroimaging Section, National Institute of Neurological Disorders and Stroke, National Institutes of Health, Bethesda, Maryland..
SOURCE: NEUROSURGERY, **(1991 Jun)** 28 (6) 826-33.
Journal code: NZL. ISSN: 0148-396X.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199110
AB Positron emission tomography with [18F]fluorodeoxyglucose (FDG) was carried out in 24 patients with pituitary macroadenomas (32 studies) to assess the glucose utilization of these **tumors** in vivo. The adenoma metabolic index, which is the ratio of FDG uptake of **tumor** to a whole brain slice, was calculated. Comparisons were made between **tumor** uptake of FDG and hormone secretion and response to therapies. In each positron emission tomography study, the macroadenoma could be easily identified visually as an area of increased FDG uptake near the region of the sella. FDG uptakes were highest for nonfunctional adenomas, and the **prolactin**, growth hormone, and thyroid-stimulating hormone-producing groups displayed similar levels of glucose metabolism. The adenoma metabolic index for all **tumors** averaged 1.3, ranging from 0.3 for a thyroid-stimulating hormone adenoma to 3.5 for a nonfunctional **tumor**. **Tumors** did not exhibit metabolic rates that could characterize the type of hormone produced. Recurrent macroadenomas displayed metabolism similar to **tumors** not operated on, whereas irradiated adenomas showed lower glucose uptake than nonirradiated **tumors**. Drug therapy with bromocriptine or the long-acting somatostatin analogue octreotide also decreased the glucose utilization of the **tumor**. There was no correlation between the amount of hormone produced and the adenoma metabolic index when a group of **tumors** was analyzed. Patients scanned more than once, however, demonstrated changes in hormone levels that changed or did not change in parallel with **tumor** metabolism. Thus, positron emission tomography offers the potential capability for predicting and defining the growth of pituitary adenomas. This may be of particular value when plasma hormone assays and conventional imaging techniques prove inadequate for monitoring patient response to therapy.

L17 ANSWER 16 OF 43 MEDLINE DUPLICATE 10
ACCESSION NUMBER: 91360152 MEDLINE
DOCUMENT NUMBER: 91360152
TITLE: Long-term effects of radiotherapy and bromocriptine treatment in patients with previous surgery for macroprolactinomas.
AUTHOR: Moberg E; af Trampe E; Wersall J; Werner S
CORPORATE SOURCE: Department of Endocrinology, Karolinska Hospital, Stockholm, Sweden..
SOURCE: NEUROSURGERY, **(1991 Aug)** 29 (2) 200-4; discussion 204-5.
Journal code: NZL. ISSN: 0148-396X.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals

ENTRY MONTH: 199112

AB The long-term effect of radiotherapy and bromocriptine treatment was retrospectively evaluated in 25 patients who had previously undergone transsphenoidal surgery for treatment of macroprolactinomas. Surgery had reduced the median serum **prolactin** (PRL) value from 613 micrograms/l, a reduction of 53%. Postoperative bromocriptine was administered to 21 of the 25 patients. In 14 of these patients, serum PRL values became normal or almost normal with medication. There were no radiological or ophthalmological signs of progressive **tumor** growth during bromocriptine treatment. Fourteen patients received postoperative radiotherapy. After withdrawal of bromocriptine in 13 of these patients an average of 7 years after radiotherapy, the median serum PRL value had further decreased by 95%. The PRL reduction was similar for all doses applied, 38 to 52 Gy. After withdrawal of bromocriptine in 8 patients not receiving radiotherapy an average of 7 years after operation, the median serum PRL level had further decreased by 75%. At follow-up, 18 additional instances of pituitary insufficiency had developed in the group receiving radiotherapy, compared with 8 cases of insufficiency in the group not receiving radiotherapy. Thus, because bromocriptine has a long-standing effect on **prolactin** secretion, and radiotherapy is associated with a notably high incidence of pituitary insufficiency, we propose that **photon** irradiation should be considered mainly for patients who are not candidates for surgical or medical treatment.

L17 ANSWER 17 OF 43 MEDLINE DUPLICATE 11

ACCESSION NUMBER: 92025336 MEDLINE

DOCUMENT NUMBER: 92025336

TITLE: Treatment of estrogen-dependent gynecological disorders with the gonadotropin releasing hormone agonist buserelin.

AUTHOR: Biberoglu K; Gursoy R; Yildiz A

CORPORATE SOURCE: Gazi University Medical School, Department of Obstetrics and Gynecology, Besevler, Ankara, Turkey.

SOURCE: GYNECOLOGICAL ENDOCRINOLOGY, **(1991 Jun)** 5 (2) 109-22.
Journal code: 125. ISSN: 0951-3590.

PUB. COUNTRY: ENGLAND: United Kingdom
(CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199201

AB The authors examined the effect and tolerability of buserelin in 40 women with endometriosis and ten women with uterine leiomyoma. Buserelin was given intranasally, 200 micrograms three times a day for 6 months. Laparoscopy was performed before and after, and ultrasonography during the treatment. Hormone and lipid profiles and other biochemical tests were run during the treatment. The bone mineral density was tested by dual **photon** absorptiometry before and after therapy in a group of patients. Although most of the patients complained of hot flushes, no women dropped out. AFS mean pelvic score decreased from 24.10 to 6.95 and the size of the fibroids decreased by 69% at the end of 6 months of treatment. In conclusion, our data suggest that the use of GnRH agonist has a place in the treatment of endometriosis and uterine leiomyoma but further studies are needed to conclude that buserelin given intranasally

at a dose of 600 micrograms/day for 6 months is an alternative to other conventional medical treatment modalities in terms of pregnancy and recurrence rates.

L17 ANSWER 18 OF 43 MEDLINE DUPLICATE 12
ACCESSION NUMBER: 90323099 MEDLINE
DOCUMENT NUMBER: 90323099
TITLE: Regulation and molecular characterization of dopamine D2 receptors in a **prolactin**-secreting 7315a anterior pituitary **tumor**.
AUTHOR: Lew J Y; Zawadzka H; Feigenblum D; Tang D; Filer D; Benedetto P; Goldstein M
CORPORATE SOURCE: Department of Psychiatry, New York University Medical Center, NY 10016.
CONTRACT NUMBER: MH 43230 (NIMH)
MH 02717 (NIMH)
06801
SOURCE: EUROPEAN JOURNAL OF PHARMACOLOGY, **(1990 Jun 12)** 188 (6) 329-34.
Journal code: EN6. ISSN: 0014-2999.
PUB. COUNTRY: Netherlands
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199011
AB The regulation and molecular properties of the dopamine (DA) D2 receptors were compared in the **prolactin**-secreting 7315a anterior pituitary **tumor** with those in the striatum of rats. Chronic treatment with haloperidol increases the maximal binding for [3H]spiroperidol in **tumor** and striatum, but the percent increase is much higher in **tumor** than in striatum. **Photoaffinity** labelling of DA D2 receptors with N-(p-azido-m-[125I]iodophenethyl)spiperone ([125I]N3-NAPS) yielded a major specifically labeled peptide with the Mr of 32-34 kDa in **tumor**, and two specifically labeled peptides with Mr of 32-34 and 92-94 kDa in striatum. The analysis of DA D2 receptor mRNA shows that the size is similar in **tumor** and striatum. The DA D2 receptor mRNA in **tumor** is very low and chronic treatment with haloperidol produces a considerable increase of the specific mRNA. It is postulated that the reported defect in regulation of **prolactin** release by DA agonists might be due to posttranslational changes in the **tumor** DA D2 receptor.

L17 ANSWER 19 OF 43 BIOSIS COPYRIGHT 2000 BIOSIS
ACCESSION NUMBER: 1992:212972 BIOSIS
DOCUMENT NUMBER: BA93:113197
TITLE: REGULATION AND MOLECULAR CHARACTERIZATION OF DOPAMINE D-2 RECEPTORS IN A **PROLACTIN**-SECRETING 7315A ANTERIOR PITUITARY **TUMOR**.
AUTHOR(S): LEW J Y; ZAWADZKA H; FEIGENBLUM D; TANG D; FILER D; BENEDETTO P; GOLDSTEIN M
CORPORATE SOURCE: NEW YORK UNIV. MED. CENT., NEUROCHEM. RES. LAB., 560 FIRST AVE., ROOM H-544, NEW YORK, N.Y. 10016.
SOURCE: EUR J PHARMACOL MOL PHARMACOL SECT, (1990) 2 (6), 329-334.
CODEN: EJPPET. ISSN: 0922-4106.
FILE SEGMENT: BA; OLD
LANGUAGE: English
AB The regulation and molecular properties of the dopamine (DA) D2 receptors

were compared in the **prolactin**-secreting 7315a anterior pituitary **tumor** with those in the striatum of rats. Chronic treatment with haloperidol increases the maximal binding for [3H]spiroperidol in **tumor** and striatum, but the percent increase is much higher in **tumor** than in striatum. **Photoaffinity** labelling of DA D2 receptors with N-(p-azido-m-[125]iodophenethyl)spiperone ([125I]N3-NAPS) yielded a major specifically labeled peptide with the Mr of 32-34 kDa in **tumor**, and two specifically labeled peptides with Mr of 32-34 and 92-94 kDa in striatum. The analysis of DA D2 receptor mRNA shows that the size is similar in **tumor** and striatum. The DA D2 receptor mRNA in **tumor** is very low and chronic treatment with haloperidol produces a considerable increase of the specific mRNA. It is postulated that the reported defect in regulation of **prolactin** release by DA agonists might be due to posttranslational changes in the **tumor** DA D2 receptor.

L17 ANSWER 20 OF 43 MEDLINE DUPLICATE 13
ACCESSION NUMBER: 91151016 MEDLINE
DOCUMENT NUMBER: 91151016
TITLE: [Methods and clinical applications of positron emission tomography in endocrinology].
Methodologie et applications cliniques en endocrinologie de
la tomographie `a emission de positons.
AUTHOR: De Landsheere C; Lamotte D
CORPORATE SOURCE: Centre de Recherches du Cyclotron, B30 Universite de Li`ege, Belgique..
SOURCE: ANNALES D ENDOCRINOLOGIE, **(1990)** 51 (3-4) 148-54.
Ref: 23
Journal code: 540. ISSN: 0003-4266.
PUB. COUNTRY: France
Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LANGUAGE: French
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199106

AB Positron emission tomography (PET) allows to detect in coincidence **photons** issued from annihilation between positrons and electrons nearby situated. Tomographic detection (plane by plane) and tomographic reconstruction will lead to the quantitation of radioactive distribution per voxel, in the organ of interest. Recent tomographs can acquire simultaneously several transaxial slices, with a high sensitivity and a spatial resolution of 3-5 mm. Commonly used positron emitters have a short half-life: 2, 10, 20 and 110 min for 150, 13N, 11C and 18F, respectively. The use of these isotopes requires on line production of radionuclides and synthesis of selected molecules. In endocrinology, PET allows among others to study noninvasively the receptor density of hormone-dependent **neoplasms** such as breast, uterus, prostate **tumors** and prolactinomas. These last **tumors** represent a particular entity because of several combined characteristics: high turnover rate of amino acids, high density of dopaminergic receptors and response to bromocriptine (analogue of dopamine inhibiting the secretion of **prolactin**) in relation to the level of receptors. Because PET permits to evaluate the density of dopaminergic receptors and the metabolism of amino acids, theoretical response of the prolactinoma to

bromocriptine can be predicted, the achieved therapeutic efficacy can be estimated and the long-term follow up of **tumor** growth can be assessed. This example illustrates the clinical value of PET in endocrinology.

L17 ANSWER 21 OF 43 MEDLINE DUPLICATE 14
ACCESSION NUMBER: 91008053 MEDLINE
DOCUMENT NUMBER: 91008053
TITLE: Light deprivation retards the growth of the diethylstilbesterol-induced renal **tumor** in hamsters.
AUTHOR: Logan J L; Benson B
CORPORATE SOURCE: Research Service of the Tucson V.A. Medical Center, AZ 85723..
SOURCE: GROWTH, DEVELOPMENT, AND AGING, **(1990 Spring-Summer)** 54 (1-2) 39-43.
Journal code: GRO. ISSN: 1041-1232.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199101
AB Chronic treatment with diethylstilbesterol (DES) induces renal **cancer** in male Syrian hamsters. This **tumor** may result from direct carcinogenicity of the estrogen, but extrarenal neuroendocrine effects of DES may also be important in modulating **tumor** growth in the kidney. Since light deprivation is known to profoundly influence neuroendocrine function in the hamster, we elected to examine the effects of short **photoperiod** or blinding on the development of the DES-induced renal **tumor** in this species. Animals were maintained either in long (14 hours of light and 10 hours of dark) or short (10 hours of light and 14 hours of dark) **photoperiod** or blinded. Groups of six to eight animals were sacrificed after three, six or nine months of treatment with either DES or the vehicle. All animals treated with DES for nine months had evidence of renal **tumors**, but the rate of growth and final size of the **tumors** were significantly reduced by either maintenance in short **photoperiod** or blinding. These data provide unique evidence of the importance of neuroendocrine system in the modulation of the DES-induced renal **tumor** in hamsters.

L17 ANSWER 22 OF 43 MEDLINE DUPLICATE 15
ACCESSION NUMBER: 89087477 MEDLINE
DOCUMENT NUMBER: 89087477
TITLE: A 64 kDa protein is a candidate for a thyrotropin-releasing hormone receptor in **prolactin**-producing rat pituitary **tumor** cells (GH4C1 cells).
AUTHOR: Wright M; Hogset A; Alestrom P; Gautvik K M
CORPORATE SOURCE: Institute of Medical Biochemistry, University of Oslo, Norway.
SOURCE: BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, **(1988 Dec 30)** 157 (3) 875-82.
Journal code: 9Y8. ISSN: 0006-291X.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English

FILE SEGMENT: Priority Journals; Cancer Journals
ENTRY MONTH: 198904
AB A thyrotropin-releasing hormone (TRH) binding protein of 64 kDa has been identified by covalently crosslinking [3H]TRH to GH4C1 cells by ultraviolet illumination. The crosslinkage of [3H]TRH is UV-dose dependent and is inhibited by an excess of unlabeled TRH. A 64 kDa protein is also detected on immunoblots using an antiserum raised against GH4C1 cell surface epitopes. In a closely related cell line (GH12C1) which does not bind [3H]TRH, the 64 kDa protein cannot be demonstrated by [3H]TRH crosslinking nor by immunoblotting. These findings indicate that the 64 kDa protein is a candidate for a TRH-receptor protein in GH4C1 cells.

L17 ANSWER 23 OF 43 MEDLINE DUPLICATE 16
ACCESSION NUMBER: 88267256 MEDLINE
DOCUMENT NUMBER: 88267256
TITLE: Bone mineralization in women following successful treatment of Hodgkin's disease.
AUTHOR: Redman J R; Bajorunas D R; Wong G; McDermott K; Gnecco C; Schneider R; Lacher M J; Lane J M
CORPORATE SOURCE: Department of Medicine, Memorial Sloan-Kettering Cancer Center, New York, New York 10021.
CONTRACT NUMBER: RR00047 (NCRR)
CA-29502-06 (NCI)
AM-07281 (NIADDK)
SOURCE: AMERICAN JOURNAL OF MEDICINE, **(1988 Jul)** 85 (1) 65-72.
Journal code: 3JU. ISSN: 0002-9343.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals; Cancer Journals
ENTRY MONTH: 198810
AB PURPOSE: Women with Hodgkin's disease in whom a cure has been achieved may be at risk for osteoporosis because of therapy-induced premature menopause. Our objective was to gather information regarding the integrity of bone mass in such long-term **cancer** survivors. SUBJECTS AND METHODS: Bone mineral density was measured using **photon** absorptiometry in five groups of women: 11 patients with Hodgkin's disease and ovarian failure (Group I); six patients with Hodgkin's disease and ovarian failure who received estrogen replacement (Group II); 15 patients with Hodgkin's disease and normal ovarian function (Group III); 16 premenopausal control subjects (Group IV); and 11 postmenopausal control subjects (Group V). All patients with Hodgkin's disease were in remission and had completed treatment more than five years earlier. RESULTS: Subjects in Group I were found to have significantly decreased radial ($p = 0.0009$), lumbar spine ($p = 0.002$), and femoral neck ($p = 0.0001$) bone mineral density measurements compared with those in subjects in Group IV; the bone mineral density measurements at all sites of subjects in Group I were no different than those of subjects in Group V. Subjects in Group III had bone density measurements that were similar to those in Group IV, although the radial bone mineral density value was significantly lower (p

= 0.0004). Determination of serum gonadotropins and estradiol was consistent with the menstrual status defining the five groups. No secondary causes for decreased bone mineral density values could be detected, since the mean serum levels of parathyroid hormone, calcium, phosphorus, and vitamin D metabolites were similar among the groups, and all **prolactin** levels were normal. CONCLUSION: We have identified a new population of patients with a high risk of osteoporosis, and these results emphasize the importance of treatment-related ovarian failure in the pathogenesis of osteoporosis.

L17 ANSWER 24 OF 43 MEDLINE DUPLICATE 17
ACCESSION NUMBER: 89153326 MEDLINE
DOCUMENT NUMBER: 89153326
TITLE: Necroses of **prolactin**-secreting pituitary adenomas under treatment with dopamine agonists: light microscopical and morphometric studies.
AUTHOR: Hallenga B; Saeger W; Ludecke D K
CORPORATE SOURCE: Department of Pathology, Marienkrankenhaus Hamburg, FRG.
SOURCE: EXPERIMENTAL AND CLINICAL ENDOCRINOLOGY, **(1988 Sep)** 92 (1) 59-68.
Journal code: EPA. ISSN: 0232-7384.
PUB. COUNTRY: GERMANY, EAST: German Democratic Republic
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198906
AB In order to clarify the mechanism by which **prolactin**-secreting adenomas reduce in size during treatment with dopamine agonists (DA), we studied altogether 18 chromophobe pituitary adenomas by carrying out light microscopical cell counting of necrobiotic alterations and necroses in **photographs** of semi-thin sections. Depending on hormonal activity and preoperative treatment of the patients 3 groups of adenomas were formed: 6 **prolactin** producing adenomas were treated with bromocriptine and lisuride (group 3). 8 cases remained preoperatively without medical treatment (group 2). For comparison, we studied 4 cases of clinically inactive pituitary adenomas (group 1). All adenomas were immunohistologically positive for **prolactin**. By classifying each **tumor** cell in one of four stages of necrotic alteration (stage 1: intact cell, stage 2: slightly condensed nucleus and shrunken cytoplasm, stage 3: necrotic cell with still visible nuclear membrane, stage 4: cell debris) we arrived at an index for necrobiotic alterations of the 18 adenomas. We found a significantly higher rate of cell necroses in DA-treated **tumors** compared with preoperatively untreated prolactinomas and inactive adenomas. Previous investigations in this field have revealed that a reduction in cell size may well cause the shrinkage of the prolactinomas after DA-therapy. The results presented in this paper indicate, however, that the role of necroses now needs to be given much closer attention as an additional factor.

L17 ANSWER 25 OF 43 MEDLINE DUPLICATE 18
ACCESSION NUMBER: 88061494 MEDLINE
DOCUMENT NUMBER: 88061494
TITLE: Hyperprolactinemia and hypothyroidism following cytotoxic therapy for central nervous system malignancies.
AUTHOR: Constine L S; Rubin P; Woolf P D; Doane K; Lush C M

CORPORATE SOURCE: Department of Radiation Oncology, University of Rochester Medical Center, NY 14642..
SOURCE: JOURNAL OF CLINICAL ONCOLOGY, **(1987 Nov)** 5 (11) 1841-51.
Journal code: JCO. ISSN: 0732-183X.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals; Cancer Journals
ENTRY MONTH: 198803

AB Endocrinologic dysfunction including hyperprolactinemia and hypothyroidism are recognized complications of irradiation to the hypothalamic-pituitary axis or thyroid gland in the course of treating CNS malignancies. However, the frequency of these adverse effects in both short- and long-term survivors may be underestimated. Sixty-five patients treated in the University of Rochester **Cancer** Center since 1968 with radiation with or without BCNU chemotherapy for CNS **tumors** not involving the hypothalamic-pituitary axis were evaluated for thyroid, **prolactin**, and gonadal disturbances regardless of clinical symptomatology. **Prolactin** values were elevated in 19 of 47 patients (40%). For males and females treated with greater than 55 Gy, abnormal values were present in nine of 11 (82%) and seven of 14 (50%), respectively. For males and females treated with less than or equal to 55 Gy, two of nine (22%) and one of 13 (8%), respectively, were abnormal (P = .0001). Six of six patients who also received BCNU chemotherapy were hyperprolactinemic, as compared with six of ten (60%) who did not receive BCNU. Seven of eight females with elevated **prolactin** levels had menstruation abnormalities, and five of seven adult males noted a decrease in libido. Mild abnormalities in testosterone concentration were found in three of nine men evaluated, all of whom had normal gonadotropins. Of 47 patients who did not receive irradiation to the spinal axis (and thus the thyroid gland), ten (21%) had a decreased thyroxin (T4) value. Only one of these patients had an elevated thyroid-stimulating hormone (TSH) value. Of 32 patients who received greater than 55 Gy, ten (31%) had a low T4, compared with zero of 15 who received less than or equal to 55 Gy (P = .0001). Four of eight patients (50%) who also received BCNU had low T4 values, as compared with three of 14 (21%) who did not receive BCNU. Of 15 patients who were treated with 4 to 10 MV **photon** irradiation to the spinal axis, five patients (33%) had elevated TSH values. The mean spinal axis dose in these patients was 33 Gy. Two euthyroid children in this group manifested the early onset of puberty. The complex of endocrinologic abnormalities observed in several patients receiving only cranial irradiation, that is elevated **prolactin**, decreased thyroid, and gonadal hormone secretion in the presence of otherwise normal pituitary hormone levels, suggests a radiation-induced insult to the hypothalamic regulation of pituitary function.

L17 ANSWER 26 OF 43 MEDLINE DUPLICATE 19
ACCESSION NUMBER: 88035037 MEDLINE
DOCUMENT NUMBER: 88035037
TITLE: Characterization of D2 dopamine receptors in

dopamine-resistant **prolactin**-secreting rat pituitary **tumors** 7315a and MtTW15.

AUTHOR: Bouvier C; Lagace G; Lafond J; Beauregard G; Potier M; Collu R

CORPORATE SOURCE: Research Unit on Reproductive and Developmental Biology, Ste.-Justine Hospital, University of Montreal, Quebec, Canada..

SOURCE: JOURNAL OF NEUROCHEMISTRY, **(1987 Nov)** 49 (5) 1644-50.
Journal code: JAV. ISSN: 0022-3042.

PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 198802

AB We have investigated the structure of D2 receptors present in two **prolactin**-secreting, dopamine-resistant, transplantable rat pituitary **tumors**, 7315a and MtTW15. These receptors specifically bind with high affinity the dopamine antagonist [3H]spiroperidol when membrane bound or solubilized by [3-(3-cholamidopropyl)-dimethyl-ammonio]-1-propane sulfonate 10 mM and are pharmacologically characterized as D2 type. Target-size analysis by radiation inactivation indicated a molecular mass of approximately 100,000 and 200,000 daltons for receptors present respectively in 7315a and MtTW15 **tumors** either membrane bound or solubilized. The minimal size of the D2 binding site was evaluated at 94,000 daltons by **photoaffinity** labeling with [125I]azido-N-(p-aminophenethyl)-spiperone followed by sodium dodecyl sulfate-polyacrylamide gel electrophoresis. A guanine nucleotide had no effect on the displacing potency of the agonist N-propylnorapomorphine evaluated with membrane-bound or solubilized receptors obtained from either **tumor**. These results suggest the absence or inactivation of a guanine nucleotide binding protein in the receptorial complex of these **tumors**. Thus, our data indicate that a structural anomaly is present in the D2 receptorial complex of these **prolactin**-secreting rat pituitary **tumors**, which may be responsible for their resistance to the inhibitory effects of dopamine.

L17 ANSWER 27 OF 43 MEDLINE DUPLICATE 20

ACCESSION NUMBER: 87010679 MEDLINE

DOCUMENT NUMBER: 87010679

TITLE: Solubilization and characterization of D2-dopamine receptors in an estrone-induced, **prolactin**-secreting rat pituitary adenoma.

AUTHOR: Bouvier C; Potier M; Beauregard G; Lafond J; Amlaiky N; Caron M G; Collu R

CONTRACT NUMBER: NS-19576 (NINDS)

SOURCE: JOURNAL OF NEUROCHEMISTRY, **(1986 Nov)** 47 (5) 1653-60.
Journal code: JAV. ISSN: 0022-3042.

PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 198701

AB D2-dopamine (3,4-dihydroxyphenylethylamine) receptors were successfully solubilized with 3-[(3-cholamidopropyl)-dimethylammonio]-1-propane sulfonate from an estrone-induced rat pituitary adenoma. Forty-five

percent of initial protein and 48% of initial [3H]spiroperidol binding sites were solubilized. The high affinity as well as the stereoselectivity of the sites was preserved. The order of potency of dopaminergic agonists was found to be typical of D2 receptors. Target size analysis by radiation inactivation indicated a molecular weight of 143,000 +/- 3,000 and of 106,000 +/- 4,000 daltons for membrane-bound and solubilized receptors, respectively. This suggests the loss of a 37,000-dalton subunit during solubilization without significant modification of binding characteristics. Sodium dodecyl sulfate-polyacrylamide gel electrophoresis of receptor protein preparation **photolabeled** with N-(p-azido-m[125I]iodophenethyl)spiroperidol confirmed the existence of a 94,000-dalton peptide which probably constitutes the ligand binding site of the receptor. Thus, our data indicate that chronic estrogen treatment of rats, although inducing a pituitary adenoma, does not modify the pharmacological characteristics of D2 receptors. These data suggest therefore that these adenoma may represent an ideal source of material for further biochemical characterization of D2 receptors.

L17 ANSWER 28 OF 43 CANCERLIT
ACCESSION NUMBER: 87638053 CANCERLIT
DOCUMENT NUMBER: 87638053
TITLE: CHARACTERIZATION AND REGULATION OF SOMATOSTATIN RECEPTORS IN RAT PITUITARY CELLS.
AUTHOR: Presky D H
CORPORATE SOURCE: Harvard University.
SOURCE: Diss Abstr Int (Sci), **(1986)**. Vol. 47, No. 1, pp. 148.
ISSN: 0419-4217.
DOCUMENT TYPE: (THESIS)
FILE SEGMENT: ICDB
LANGUAGE: English
ENTRY MONTH: 198711

AB This research investigated the interaction of the hypothalamic peptide somatostatin (SRIF) with GH4C1 rat pituitary **tumor** cells. Using an acid extraction technique to discriminate between intracellular and surface-bound peptide, I found that neither receptor-bound 125I-Tyr1 SRIF nor 125I-Tyr11 SRIF was rapidly internalized. However, both radioanalogs were partially (50/70%) degraded to 125I-tyrosine prior to dissociation. Since the lysosomal inhibitors leupeptin, ammonium chloride and chloroquine did not reduce receptor-mediated SRIF degradation, this process must be non-lysosomal. In contrast, epidermal growth factor (EGF) was rapidly internalized and degraded to 125I-tyrosine in lysosomes. Chronic treatment of cells with SRIF increased the number of SRIF receptors. This increase required 15 hr to reach a plateau level of 220% of untreated controls and was dose-dependent (ED50 = 2 nM). The effects of SRIF treatment on receptor modulation were specific for the SRIF receptor: binding of EGF, bombesin, insulin and thyrotropin-releasing hormone were unaffected. Modulation of SRIF binding was not mimicked by other agents which regulate hormone release indicating that occupancy of SRIF receptors triggered this event. The increase in SRIF binding was not seen in membranes prepared from SRIF-treated cells, suggesting receptor redistribution as a possible mechanism for the increased binding in cells.

SRIF treatment did not alter the ED50 for SRIF inhibition of hormone-stimulated cAMP accumulation or **prolactin** release, demonstrating that desensitization does not occur. Detailed analysis of the binding kinetics of 125I-Tyr11 SRIF showed that this radioanalog was superior to 125I-Tyr1 SRIF for binding studies in cells due to its higher affinity for the SRIF receptor. This increased affinity was due to a decreased dissociation rate for 125I-Tyr11 SRIF (half-time of 6 hr at 37 C). However, I-Tyr11 SRIF inhibition of stimulated **prolactin** release was reversed within 30 min after removal from the incubation medium, suggesting that the termination of SRIF action is more complicated than simple dissociation from the cell. **Photo**-affinity labelling and affinity cross-linking experiments identified the EGF receptor as a protein with a molecular weight of 180,000. The SRIF receptor, however, could not be identified with these techniques.

L17 ANSWER 29 OF 43 MEDLINE DUPLICATE 21
ACCESSION NUMBER: 85288478 MEDLINE
DOCUMENT NUMBER: 85288478
TITLE: Growth hormone producing pituitary adenomas with concomitant hypersecretion of **prolactin** are particularly sensitive to **photon** irradiation.
AUTHOR: Werner S; af Trampe E; Palacios P; Lax I; Hall K
SOURCE: INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY, BIOLOGY, PHYSICS, **(1985 Sep)** 11 (9) 1713-20.
Journal code: G97. ISSN: 0360-3016.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals; Cancer Journals
ENTRY MONTH: 198512
AB The effect of **photon** irradiation (50 Gy with a 3-field technique in fractionated doses) on growth hormone (GH), **prolactin** (PRL), and somatomedin A (SMA) was studied in 25 patients with acromegaly after previous unsuccessful surgery. In patients with concomitant hypersecretion of PRL, the GH reduction was 70 +/- 22% 1 year and 88 +/- 10% 3 years after radiotherapy. The corresponding reductions in patients with isolated GH hypersecretion were 42 +/- 25% and 60 +/- 22%. The reduction of GH levels was most notable the first year after radiotherapy in 16 patients and during the second year in 7 patients. Serum PRL decreased after radiotherapy in all patients with hyperprolactinemia, whereas PRL in normoprolactinemic patients showed inconsistent changes, including PRL increments in 8/12 patients. The effect of radiotherapy on GH and PRL was not correlated to the irradiation target volume or the cumulative radiation effect. SMA levels decreased after radiotherapy, but became normal only in 3 patients, all with pretreatment GH less than 5 micrograms/l. Radiotherapy, 3 years after treatment, appeared to be equivalent to the primary surgical intervention in reducing GH and SMA in patients with acromegaly due to advanced macroadenomas. Patients with concomitant hyperprolactinemia showed increased sensitivity to radiation compared to normoprolactinemic patients with acromegaly.

L17 ANSWER 30 OF 43 MEDLINE DUPLICATE 22
ACCESSION NUMBER: 86177147 MEDLINE
DOCUMENT NUMBER: 86177147
TITLE: In-vitro effects of bromocriptine on isolated pituitary adenoma cells. Ultrastructural and morphometrical studies.

AUTHOR: Saeger W; Thiel M; Caselitz J; Ludecke D K
SOURCE: PATHOLOGY, RESEARCH AND PRACTICE, **(1985 Dec)** 180 (6) 697-704.
Journal code: PBZ. ISSN: 0344-0338.
PUB. COUNTRY: GERMANY, WEST: Germany, Federal Republic of
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198607

AB 3 pituitary adenomas in hyperprolactinemia and 3 GH and **prolactin** producing tumours were analysed. The adenoma cells were prepared and held in suspension so that they could be treated with bromocriptine (10 ng and 100 ng). At different times after treatment (0.5, 60 and 90 minutes), the cells were fixed and prepared for conventional electronmicroscopy. Electron microscopic **photographs** were quantitatively analysed by the point counting method. The results were compared to those of an untreated control group. After bromocriptine influence, there was a decrease of the hormone secretion into the supernatant (2 of 3 **prolactin** producing adenomas). The **prolactin** secretion was unchanged in all 3 adenomas which produced **prolactin** and GH, but there was a decrease in the GH production in 1 of these cases. Ultrastructural morphometry revealed the following results: In **prolactin** producing adenomas, there was a decrease in the number of exocytoses, an increase in the volume density of lysosomes (2 cases) and an increase of the rough endoplasmic reticulum (1 case). The decrease of the "unorganized" cytoplasm was observed in all 3 cases, but was significant only in 1 case. There was a significant increase in secretory granules (1 case). In adenomas which produced **prolactin** and GH displayed a significant increase of the rough endoplasmic reticulum and of the granules. The outlines of the cellular membranes seemed smoother (1 case). The heterogeneous results may be interpreted as an expression of the reduced hormone secretion (secretory granules, lysosomes), some data are in accordance with the beginning of necrobiotic phenomena (rough endoplasmic reticulum). The decrease of the "unorganized" cytoplasm may be due to a shrinking process.

L17 ANSWER 31 OF 43 MEDLINE DUPLICATE 23
ACCESSION NUMBER: 84259062 MEDLINE
DOCUMENT NUMBER: 84259062
TITLE: Effect of melatonin on mammary carcinogenesis in intact and pinealectomized rats in varying **photoperiods**.
AUTHOR: Shah P N; Mhatre M C; Kothari L S
SOURCE: CANCER RESEARCH, **(1984 Aug)** 44 (8) 3403-7.
Journal code: CNF. ISSN: 0008-5472.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals; Cancer Journals
ENTRY MONTH: 198411

AB Exposure of female Holtzman rats to constant light (24 hr/day) immediately after birth significantly increased 9, 10-dimethyl-1,2-benzanthracene-induced mammary **cancer**. Such "functionally pinealectomized" animals also revealed significant increase in the circulating level of **prolactin** and exaggerated development and proliferative activity of mammary epithelium, as measured by quantitation of terminal end buds

and alveolar buds from the whole mounts and by DNA synthesis, respectively. Administration of melatonin (500 micrograms/day/rat i.p. given from 52 to 145 days of age) completely abolished the effect of functional pinealectomy by sharply reducing 9, 10-dimethyl-1,2-benzanthracene-induced **cancer** incidence from 95% to 25% during the post-9, 10-dimethyl-1,2-benzanthracene observation period which lasted up to 180 days. On the other hand, administration of melatonin to surgically pinealectomized animals exposed to constant light reversed the effect only partially by reducing the **cancer** incidence from 83% to 53%. Further, melatonin treatment in intact and surgically pinealectomized animals exposed to a short **photoperiod** revealed qualitatively similar differences in suppression of the **cancer** incidence. From these results, it is concluded that, to have an impressive antitumor effect, presence of the pineal gland is essential, and the probable site of melatonin action appears to be at both the pineal gland and the hypothalamus.

L17 ANSWER 32 OF 43 MEDLINE DUPLICATE 24
ACCESSION NUMBER: 84217201 MEDLINE
DOCUMENT NUMBER: 84217201
TITLE: Effect of varying **photoperiods** on mammary morphology, DNA synthesis, and hormone profile in female rats.
AUTHOR: Mhatre M C; Shah P N; Juneja H S
SOURCE: JOURNAL OF THE NATIONAL CANCER INSTITUTE, **(1984 Jun)** 72 (6) 1411-6.
Journal code: J9J. ISSN: 0027-8874.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals; Cancer Journals
ENTRY MONTH: 198409
AB A clear positive correlation between circulating levels of **prolactin** (Prl) and morphologic development as well as DNA synthetic index in the mammary gland was established in young virgin Holtzman rats exposed to constant light from birth. The observed elevated level of circulating Prl by virtue of its morphogenic and mitogenic properties induced changes in mammary epithelium [numerous actively differentiating terminal end buds into alveolar buds (AB)] highly susceptible for the action of 7,12-dimethylbenz[a]anthracene [(DMBA) CAS: 57-97-6]. Conversely, substitution treatment with melatonin in such a model caused a significant decrease in both Prl and 17 beta-estradiol (E2) levels as well as in the morphologic and DNA synthetic pattern of the mammary gland. Administration of 2-bromo-alpha- ergocryptin in these animals caused a significant decrease in the plasma level of Prl (without affecting the level of E2) and a decrease in the density of AB and in DNA synthesis. These changes impaired the mammary gland responsiveness to DMBA as seen from the significant decrease in the incidence of mammary **carcinoma**.

L17 ANSWER 33 OF 43 MEDLINE DUPLICATE 25
ACCESSION NUMBER: 83186668 MEDLINE
DOCUMENT NUMBER: 83186668
TITLE: Bone density in amenorrheic women with and without hyperprolactinemia.

AUTHOR: Schlechte J A; Sherman B; Martin R
CONTRACT NUMBER: RR-59 (NCRR)
HD-13136 (NICHD)
SOURCE: JOURNAL OF CLINICAL ENDOCRINOLOGY AND METABOLISM, **(1983 Jun)** 56 (6) 1120-3.
Journal code: HRB. ISSN: 0021-972X.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals; Cancer Journals
ENTRY MONTH: 198308

AB To determine whether decreased bone density in patients with PRL-secreting pituitary **tumors** is specifically related to hyperprolactinemia or is a consequence of disordered pituitary-gonadal function common to all amenorrheic states, we measured the bone mineral content of the radius by **photon** absorptiometry in normal subjects, in women with amenorrhea and normal serum PRL levels, and in women with PRL-secreting pituitary **tumors**. The women did not differ significantly in mean age, height, weight, or serum calcium, phosphorous, gonadotropin, testosterone, vitamin D, or PTH concentrations, and all had normal renal and thyroid function. The bone mineral content in women with amenorrhea and normal serum PRL levels (0.91 +/- 0.02 g/cm) was not significantly different from that in control subjects (0.88 +/- 0.01 g/cm). Patients with PRL-secreting **tumors** studied 2-5 yr after transsphenoidal surgery had significantly diminished bone mineral content whether they were cured (0.82 +/- 0.02 g/cm) or had persistent amenorrhea and hyperprolactinemia (0.81 +/- 0.02 g/cm). Serum estradiol concentrations did not differ significantly in the four groups, and there was no correlation between estradiol concentration and bone mineral content or between PRL concentration and bone mineral content in the amenorrheic women. The presence of decreased bone mineral content in hyperprolactinemic patients suggests that PRL may have a direct effect on bone and may be another indication for early treatment of PRL-secreting pituitary **tumors**.

L17 ANSWER 34 OF 43 MEDLINE DUPLICATE 26
ACCESSION NUMBER: 83261563 MEDLINE
DOCUMENT NUMBER: 83261563
TITLE: **Photoperiodic** control of melanoma growth in hamsters: influence of pinealectomy and melatonin.
AUTHOR: Stanberry L R; Das Gupta T K; Beattie C W
CONTRACT NUMBER: BRSG-7870
SOURCE: ENDOCRINOLOGY, **(1983 Aug)** 113 (2) 469-75.
Journal code: EGZ. ISSN: 0013-7227.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals; Cancer Journals
ENTRY MONTH: 198311

AB Pinealectomy (PX) increased MM1 (melanotic melanoma no. 1) hamster melanoma growth in animals held under a 14-h light, 10-h dark (14:10) **photoperiod** without altering **tumor** latency. Hamsters

maintained under a 6-h light, 18-h dark (6:18) **photoperiod** exhibited gonadal collapse, a longer **tumor** latency, and slower **tumor** growth rate than animals held under 14:10. PX produced a further increase in **tumor** latency and a decrease in growth in these animals. In contrast, acute morning injection of low doses (50 micrograms/day) of melatonin or delivery by Silastic capsule (35 micrograms/day) implanted at the time of **tumor** cell inoculation increased MM1 melanoma growth in hamsters held under 14:10 **photocycle**, without affecting testicular or adrenal function. Treatment of hamsters 11 weeks before **tumor** cell inoculation with 14 micrograms/day melatonin via Silastic capsule produced a decrease in serum PRL but no change in **tumor** growth or testicular or adrenal weights in animals held under 14:10. Treatment of hamsters with 17.7 micrograms/day melatonin (Silastic capsule) 11 weeks before **tumor** cell inoculation increased testes and adrenal weights as well as serum PRL and androgen levels, but significantly decreased **tumor** growth in hamsters held under a short daily **photoperiod**. These results suggest that the **photoperiod** under which hamsters are maintained dictates the growth rate of MM1 **tumors** and the effect of PX on **tumor** behavior. When **photoperiod** significantly alters gonadal and adrenal function, the quantity, time, and duration of melatonin presentation are all important variables in the effect of melatonin on **tumor** growth.

L17 ANSWER 35 OF 43 MEDLINE DUPLICATE 27
ACCESSION NUMBER: 83102886 MEDLINE
DOCUMENT NUMBER: 83102886
TITLE: Effect of continuous light on the incidence of 9,10-dimethyl-1,2-benzanthracene induced mammary **tumors** in female Holtzman rats.
AUTHOR: Kothari L S; Shah P N; Mhatre M C
SOURCE: CANCER LETTERS, **(1982 Sep)** 16 (3) 313-7.
Journal code: CMX. ISSN: 0304-3835.
PUB. COUNTRY: Netherlands
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198305

AB The pineal has been recently implicated in mammary tumorigenesis. Effect of physiological pinealectomy brought about by subjecting female Holtzman rats to permanent lighting (24 h/day) from birth was studied on the incidence of 9,10-dimethyl-1,2-benzanthracene (DMBA) induced mammary **tumors**. The incidence of adenocarcinoma was 95% in animals maintained in continuous **photoperiod** in contrast to that (60%) observed in control animals maintained on a light/dark (10/14 h) schedule.

Further, the latency period of **tumor** appearance (61.5 +/- 9 days) in the former group was found to be significantly shorter than that seen in the latter group (93.7 +/- 8.3 days). Explanations are offered for this difference in the observed incidence.

L17 ANSWER 36 OF 43 CANCERLIT
ACCESSION NUMBER: 82621512 CANCERLIT
DOCUMENT NUMBER: 82621512
TITLE: PITUITARY ADENOMAS.
AUTHOR: Sheline G E
CORPORATE SOURCE: Div. Radiation Oncology, Univ. California, San Francisco, CA.

SOURCE: Oncologic, **(1981)**. Vol. 12, pp. 197.
DOCUMENT TYPE: Book; (MONOGRAPH)
FILE SEGMENT: ICDB
LANGUAGE: English
ENTRY MONTH: 198208
AB Pituitary adenomas are discussed and in three sections the following are: included a 'self-instructional text' which features answers and comments to specific questions asked in the text, a 'study guide' with spaces for the reader to write responses, and a 'post-test' unit for the reader to send in for grading and receive continuing education credits. The main presentation consists of many figures, graphs, radiographs, and **photographs** related to the areas treated: acromegaly, Cushing's disease, **prolactin**-secreting **tumors**, **tumors** due to mass effects, and craniopharyngiomas. Some areas reviewed for acromegaly include clinical presentation, work-up procedures, radiographic presentation, anatomy and physiology, incidence and etiology, staging, and various forms of treatment. Some areas treated with regard to **prolactin**-secreting **tumors** includes surgical treatment, 'empty sella', and radiation therapy. The self-instructional and self-evaluation portions of the book are designed to help the reader to examine his decision-making ability as regards pituitary **tumors**. (105 Refs)

L17 ANSWER 37 OF 43 BIOSIS COPYRIGHT 2000 BIOSIS
ACCESSION NUMBER: 1982:222354 BIOSIS
DOCUMENT NUMBER: BA73:82338
TITLE: SPECIFIC AND DIRECT FLUORINATION OF AN HISTIDINE CONTAINING PEPTIDE THYROLIBERIN.
AUTHOR(S): LEVINE-PINTO H; BOUABDALLAH B; MORGAT J L; GOURDJI D; FROMAGEOT P
CORPORATE SOURCE: SERVICE DE BIOCHIMIE, DEP. DE BIOLOGIE, CEN SACLAY, 91191-GIF-SUR-YVETTE, CEDEX FRANCE.
SOURCE: BIOCHEM BIOPHYS RES COMMUN, **(1981 (RECD 1982))** 103 (4), 1121-1130.
CODEN: BBRCA9. ISSN: 0006-291X.
FILE SEGMENT: BA; OLD
LANGUAGE: English
AB A direct fluorination of the imidazole side chain of thyroliberin using a **photochemical** method is described. Preparation of 5-fluoroimidazole-thyroliberin and 2-fluoroimidazole-thyroliferin was achieved by successive diazocoupling, amination and fluorination. Specifically substituted derivatives were purified and identified at each step. 5-fluoroimidazole-thyroliberin was as active as TRF on short-term **prolactin** release in [rat pituitary **tumor**] GH3 cell lines and more active (4.5 times) than the parental peptide on long-term experiments. The 2-fluoroimidazole-thyroliberin biological activity test shall be delayed since its chemical stability is not known precisely.

L17 ANSWER 38 OF 43 CANCERLIT
ACCESSION NUMBER: 81617242 CANCERLIT
DOCUMENT NUMBER: 81617242
TITLE: ALPHA PARTICLES VERSUS CONVENTIONAL RADIOTHERAPY TO THE PITUITARY REGION: A COMPARISON OF RISK-BENEFIT.
AUTHOR: Linfoot J A
CORPORATE SOURCE: No affiliation given.
SOURCE: Clin Neurosurg, **(1980)**. Vol. 27, pp. 83-98.

ISSN: 0069-4827.
DOCUMENT TYPE: Book; (MONOGRAPH)
General Review; (REVIEW)
FILE SEGMENT: ICDB
LANGUAGE: English
ENTRY MONTH: 198106
AB The results of alpha particle pituitary irradiation (APPI), initiated at the Lawrence Berkeley Laboratory, University of California, Berkeley, and the results of conventional **photon** irradiation (gamma or x-rays) are presented. Both forms of radiation therapy are effective in the control of juvenile and adult Cushing's disease. The overall results indicate that the more intense radiation delivered with alpha particles produces responses superior to those achieved with **photon** therapy. The use of APPI and **photon** radiotherapy in the treatment of **prolactin**-secreting **tumors** is discussed.
The success of radiotherapy in acromegaly is determined by the size of the **tumor**. Patients with suprasellar extension should have surgical decompression, followed by radiation with either alpha particles or **photons**, depending on the size of the lesion. If the lesion is greater than 2.5 cm, APPI, as it is currently employed at the Lawrence Berkeley Laboratory, cannot be appropriately used, and **photon** or proton beam therapy is recommended. Similar size restrictions do not exist for proton beam Bragg peak therapy. The effects of APPI are more rapid in the treatment of acromegaly, and the overall results seem to be slightly superior to those achieved with **photon** therapy. Both APPI and **photon** therapy carry a high incidence of hypopituitarism. Both modes of therapy have low incidences of neurological complications. (37 Refs)

L17 ANSWER 39 OF 43 CANCERLIT
ACCESSION NUMBER: 81614154 CANCERLIT
DOCUMENT NUMBER: 81614154
TITLE: OVERVIEW OF PITUITARY **TUMOR** TREATMENT.
AUTHOR: Kohler P O
CORPORATE SOURCE: Univ. Arkansas for Medical Sciences, Little Rock, AR, 72205
SOURCE: Non-serial, **(1980)**. The Pituitary Adenoma. Post KD, Jackson IM, and Reichlin S, ed. New York, Plenum Medical Book Company, 507, pp., 1980. :.
DOCUMENT TYPE: Book; (MONOGRAPH)
General Review; (REVIEW)
FILE SEGMENT: ICDB
LANGUAGE: English
ENTRY MONTH: 198105
AB The radiation and surgical treatment of large pituitary adenomas (functioning and nonfunctioning) and considerations in the choice of therapy are reviewed. The possible choices of therapy for patients with acromegaly, **prolactin**-secreting **tumors**, and Cushing's diseases are discussed separately, including medical, radiation, and surgical approaches. The treatment of miscellaneous **tumors** and lesions is summarized. Although medical management is possible for patients with prolactinomas, acromegaly, and Cushing's syndrome, this form of treatment is not considered definitive therapy. Transsphenoidal microsurgery has developed to the point that hypersecretory small adenomas

can be removed with preservation of normal pituitary function. This approach has been particularly useful in **prolactin**- and corticotropin-secreting microadenomas and in many growth hormone-secreting **tumors**. Good results have also been obtained with proton-beam and alpha-particle irradiation of small **tumors** producing growth hormone or corticotropin. The transsphenoidal approach is being used with increasing frequency for larger **tumors**, but very large **tumors** extending above the optic chiasm require the transfrontal approach. **Photon** or conventional radiotherapy remains the primary form of treatment in some patients with large **tumors**, especially those who are poor surgical risks. Conventional radiation is also useful in children with Cushing's disease. Some patients with hypersecretory syndromes or nonfunctioning syndromes may require a combined surgical and radiotherapy approach. (79 Refs)

L17 ANSWER 40 OF 43 BIOSIS COPYRIGHT 2000 BIOSIS
ACCESSION NUMBER: 1978:197519 BIOSIS
DOCUMENT NUMBER: BA66:10016
TITLE: HETEROGENEITY OF THE MTTW-15 MAMMO SOMATOTROPIC **TUMOR** PART 1 LIGHT MICROSCOPIC EVALUATION OF CELL TYPES BY MEANS OF IMMUNO CYTOCHEMISTRY MORPHOMETRIC QUANTITATION FLUORESCENCE CYTO **PHOTOMETRY** AND RADIO IMMUNOASSAY.
AUTHOR(S): PARSONS J A; ERLANDSEN S L; CARPENTER A-M; DEBAULT L E
CORPORATE SOURCE: DEP. ANAT., UNIV. MINN. SCH. MED., MINNEAPOLIS, MINN. 55455, USA.
SOURCE: ANAT REC, (1978) 190 (3), 719-734.
CODEN: ANREAK. ISSN: 0003-276X.
FILE SEGMENT: BA; OLD
LANGUAGE: English
AB Large MtTW15 rat pituitary **tumors** produced 200- to 800-fold elevations in serum growth hormone (GH) and **prolactin** (PRL) levels. Female **tumor** host showed doubling in body weight, milk secretion and 2-fold hepatosplenomegaly. Pituitaries of host animals were reduced by about 50% in weight and concentrations of GH and PRL. Large **tumors** were well-encapsulated, multinodular and showed variable amounts of necrosis and hemorrhage. Cytofluorometric analysis revealed a range of 100-fold in nuclear DNA content of **tumor** parenchymal cells which were chromophobic, pleomorphic and frequently mitotic. Concentrations of hormones in **tumors** were less than in normal pituitaries and highly variable with the ratio of GH/PRL ranging up to 30-fold within the same **tumor**. Immunostaining and linear scanning quantitation showed that about 50% of the **tumor** cells contained immunodetectable hormones. Comparison of immunostained adjacent sections showed that hormone-containing **tumor** cells were pleomorphic, unequally distributed within nodules, lacking distinctive identifying morphological characteristics and they contained GH or PRL but not both hormones simultaneously. Large MtTW15 **tumors** are comprised of a markedly heterogeneous population of **tumor** cells and the hormone-containing cells are monohormonal secreting **tumor** cells which can produce GH or PRL but not both hormones.

L17 ANSWER 41 OF 43 EMBASE COPYRIGHT 2000 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 76085965 EMBASE
DOCUMENT NUMBER: 1976085965
TITLE: Controlled clinical trial of L dopa and nafoxidine in advanced breast **cancer**: an E.O.R.T.C. study.

AUTHOR: Engelsman E.; Heuson J.C.; Blonk Van Der Wijst J.; et al.
CORPORATE SOURCE: Dept. Int. Med., Netherlands Cancer Inst., Antoni Van Leeuwenhoek Ziekenh., Amsterdam, Netherlands
SOURCE: British Medical Journal, (1975) 2/5973 (714-715).
CODEN: BMJOAE
DOCUMENT TYPE: Journal
FILE SEGMENT: 037 Drug Literature Index
038 Adverse Reactions Titles
016 Cancer
006 Internal Medicine
003 Endocrinology
LANGUAGE: English

AB L Dopa lowers plasma **prolactin** levels, and there have been reports that patients with advanced breast **cancer** have been successfully treated with L dopa. To test the potential value of L dopa in this disease a randomized clinical trial of L dopa and nafoxidine (as the reference compound) was conducted in postmenopausal women with advanced breast **cancer**. Objective remissions were obtained in seven out of 36 patients (19%) treated with nafoxidine but in none out of 40 patients treated with L dopa. L dopa in the dose schedule used seems to be ineffective in advanced breast **cancer**.

L17 ANSWER 42 OF 43 CANCERLIT
ACCESSION NUMBER: 75705079 CANCERLIT
DOCUMENT NUMBER: 75705079
TITLE: PATHOLOGICAL CONSIDERATIONS IN PITUITARY **TUMORS**.
AUTHOR: Bergland R M
CORPORATE SOURCE: M. S. Hershey Medical Center, Pennsylvania State Univ., Hershey, Pa. 17033.
SOURCE: Prog Neurol Surg, **(1975)**. Vol. 6, pp. 63-94.
ISSN: 0079-6492.
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
FILE SEGMENT: CARC
LANGUAGE: English
ENTRY MONTH: 197606

AB The histological, immunohistochemical, and light and electron microscopic observations of numerous pituitary **tumors** and pituitary capsules are reviewed. The early descriptions of pituitary cells and the early histological classifications by acidic-basic stains are presented. Problems of histochemical classifications of pituitary cell types are discussed; these problems include the misleading nature of target organ ablation, the biochemical species specificity of the pituitary trophic hormones, various technical problems, and the tangled nomenclature employed. A functional classification designating pituitary cells according to the hormones elaborated is then presented. Peculiar histological features of the human pituitary include the lack of the pars intermedia, the follicular cells, the posterior pituitary basophils, and the controversial 'amphophils.' The employment of electron microscopy in the study of pituitary cell types has revealed the vascular relationships, has demonstrated the morphology and packaging of pituitary hormones, and has revealed the lysosomes of **prolactin** cells and the presence of follicular cells. The use of horseradish peroxidase as a histochemical marker in electron microscopy is described, and a schematic illustration of the Nahane horseradish peroxidase immunohistochemical staining technique is presented. The early history of the use of acidic-basic stains in the classification of pituitary **tumors** has reported

the histological descriptions of chromophobic **tumors**, acromegaly, and Cushing's disease. Subsequent operative histological observations, and problems in the evaluation of pituitary **tumor** histology, are discussed in detail. The Young series of 44 consecutive pituitary **tumors** associated with acromegaly, the histological results of the Schelin series of ten acromegalic patients, and the Ray series analyzing exenterated sellae in 55 acromegalic patients are described. Discrepancies between autopsy studies and operative studies are noted. Further electron microscopic observations, radioimmune assays of pituitary hormones, and immunohistochemical analyses of pituitary **tumors** are also discussed. Following a description of the normal microvascular structure of the pituitary, the **tumor**-pituitary interface (pseudocapsule), **tumor**-seller interface (pseudocapsule) and **tumor**-brain interface (capsule) are described and diagrammatically and **photographically** represented. Studies of the vascular supply of pituitary **tumors** note the structure and importance of the normal pituitary portal system, illustrate the blood supply of experimental **tumors**, and suggest that human pituitary **tumors** may likewise derive their blood supply wholly via the pituitary portal system. (32 refs)

L17 ANSWER 43 OF 43 BIOSIS COPYRIGHT 2000 BIOSIS
ACCESSION NUMBER: 1972:237073 BIOSIS
DOCUMENT NUMBER: BA54:67067
TITLE: THE DISTRIBUTION OF IODINE-125 MARKED BOVINE **PROLACTIN** AND HUMAN CHORIONIC GONADOTROPIN IN RATS WITH EXPERIMENTAL OVARIAN **TUMORS**.
AUTHOR(S): CARLSSON S; KULLANDER S; MULLER E R A
SOURCE: ACTA OBSTET GYNECOL SCAND, (1972) 51 (2), 175-182. CODEN: AOGSAE. ISSN: 0001-6349.
FILE SEGMENT: BA; OLD
LANGUAGE: Unavailable

L12 ANSWER 1 OF 1 BIOSIS COPYRIGHT 2000 BIOSIS DUPLICATE 1
ACCESSION NUMBER: 1995:345814 BIOSIS
DOCUMENT NUMBER: PREV199598360114
TITLE: Effects of growth hormone and prolactin immune development and function.
AUTHOR(S): Murphy, William J. (1); Rui, Hallgeir; Longo, Dan L.
CORPORATE SOURCE: (1) Biol. Carcinogenesis Development Program, Program Resources, Inc./DynCorp, NCI-FCRDC, Build. 567, Room 141, Frederick, MD 21702-1201 USA
SOURCE: Life Sciences, (1995) Vol. 57, No. 1, pp. 1-14. ISSN: 0024-3205.
DOCUMENT TYPE: General Review
LANGUAGE: English

AB Growth hormone and **prolactin** are neuroendocrine hormones that exert numerous effects on immune system function and development. Several fundamental questions are addressed in this review. Do neuroendocrine hormones affect specific immune cell types? What is the physiological significance of these effects? Can these effects be exploited clinically? While it is clear that there are indeed significant interactions between the neuroendocrine and immune systems, there are relatively few examples with demonstrated physiological significance. Present studies indicate that growth hormone and **prolactin** may exert markedly different effects on immune cell types depending on their stage in differentiation. Recent emphasis has also been focussed on the use of these hormones or their antagonists clinically in the treatment of **AIDS**, **cancer**, and autoimmune disease states due to their pleiotropic effects and low toxicity after systemic **administration**. However, we do not yet have a clear picture of how the influence of neuroendocrine hormones may be used to favorably alter pathophysiologic processes affecting immune funct

L10 ANSWER 3 OF 3 SCISEARCH COPYRIGHT 2000 ISI (R) DUPLICATE 1
ACCESSION NUMBER: 95:486748 SCISEARCH
THE GENUINE ARTICLE: RH813
TITLE: **METOCLOPRAMIDE** ENHANCES THE EFFECT OF **PHOTODYNAMIC THERAPY** ON XENOGRAFTED HUMAN SQUAMOUS-CELL CARCINOMA OF THE HEAD AND NECK
AUTHOR: WERNING J W (Reprint); STEPNICK D W; JAFRI A; MEGERIAN C A; ANTUNEZ A R; ZAIDI S I A
CORPORATE SOURCE: CASE WESTERN RESERVE UNIV, DEPT PATHOL, 2085 ADELBERT RD, CLEVELAND, OH, 44106 (Reprint); CASE WESTERN RESERVE UNIV, DEPT OTOLARYNGOL HEAD & NECK SURG, CLEVELAND, OH, 44106; CASE WESTERN RESERVE UNIV, DEPT RADIAT ONCOL, CLEVELAND, OH, 44106
COUNTRY OF AUTHOR: USA
SOURCE: ARCHIVES OF OTOLARYNGOLOGY-HEAD & NECK SURGERY, (JUL 1995)
Vol. 121, No. 7, pp. 783-789.
ISSN: 0886-4470.
DOCUMENT TYPE: Article; Journal
FILE SEGMENT: LIFE; CLIN
LANGUAGE: ENGLISH
REFERENCE COUNT: 38
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

AB Objective: **Photodynamic therapy** (PDT) is a promising new treatment modality for head and neck cancer that is based on the uptake of a systemically administered photosensitizer in tumor tissue and local illumination of the lesion by a high-intensity visible light source, typically a tunable argon-pumped dye laser. We developed a new photosensitizer named silicon phthalocyanine [SiPc(OH) OSi(CH3)(2)(CH2)(3)N(CH3)(2), abbreviated as SiPc IV], which yields superior PDT responses in vitro and in vivo compared with other clinically used photosensitizers. However, tumor regrowth following SiPc IV-based PDT is still a therapeutic problem. The benzamide derivatives, for example, have been shown to enhance tumor ablation when used during radiotherapy and chemotherapy. Therefore, we used **metoclopramide** hydrochloride, a benzamide derivative, to evaluate its effects on PDT response.

Design: Intradermally injected human squamous cell carcinoma cells were grown to 40 to 80 mm(3) in athymic nude mice and irradiated with 675-nm light (75 J/cm(2), 75 mW/cm(2)) 24 hours after the intraperitoneal injection of SiPc IV (1.0 mg/kg). **Metoclopramide** hydrochloride (2 to 48 mg/kg) was injected intraperitoneally 1 hour before and 24 and 48 hours after irradiation.

Results: Tumors exposed to PDT alone showed 80% to 90% tumor regression with regrowth in most animals within 20 days. Tumors treated with **metoclopramide** hydrochloride (48 mg/kg) plus PDT demonstrated 100% tumor regression without regrowth up to the time of killing (150 days). No observable toxic effects were clinically apparent with the high doses of **metoclopramide**.

Conclusions: Our results show that administering **metoclopramide**

in combination with PDT may be a promising approach to the management of head and neck cancer.